

For ground-continuity monitoring of AC mining cables.

For Low and Medium Voltage Cables Up to 1000 Volts. Developed to comply with MSHA requirements, the tone monitor interrupts power to the mining machine if the ground wire is broken.



- The system ignores the parallel ground path effect. This being negated by means of the ground wire trap in series with the ground wire at the power center.
- Installed at the power center the Ground Sentinel® transmits a 4000 Hz tone on the phase wires, transfers it to the ground wire, and monitors continuity as the tone is returned to the SENTINEL.
- Detects open phase wires (Single Phasing).

- For monitoring ground wires of continuous miners, cutting machines, shuttle cars, roof bolters and other mining equipment.
- Simplified system — immune to voltage transients.
- No interaction on multiple installations.
- Simplified installations, no phasing required.
- May be installed and tested with no power on the power cable.

Specifications

Mechanical:

Stainless Steel 7.46" H x 2.32"W x 5.62" D

Electrical:

- Power 117 V ac, 50/60 Hz ± 15% (105V to 135V)
- One plug-in PC board contains all electronics, including the relay
- Frequency 4000 Hz

Ordering Information

- Ground Sentinel® GM8000
- Filter, 3 Phase FI2559
- Ground Wire Trap GM1004

A Wireless System includes a Ground Sentinel®, a Ground Wire Trap, and two 3-phase series tuned filters for putting the signal on the phase wires and transforming it to the ground wire.

